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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/318,994	05/26/1999	HIROSHI SATO	1232-4540	2182

7590 02/12/2003

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EXAMINER
LEE, CHEUKFAN

ART UNIT	PAPER NUMBER
2622	

DATE MAILED: 02/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)
09/318,994	Sato et al.
Examiner: Chieukfan Lee	Group Art Unit: 2622

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE TWO (2) MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

☑ Responsive to communication(s) filed on 11-25-02.

☐ This action is **FINAL.**

☑ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle,* 1935 C.D. 1 1; 453 O.G. 213.

Disposition of Claims

☑ Claim(s) 1-53 is/are pending in the application.

Of the above claim(s) 1-14, 29-42 and 51-53 is/are withdrawn from consideration.

☑ Claim(s) 15-28 and 43-50 is/are allowed.

☐ Claim(s) _____ is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

☑ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 11 9(a)-(d).

☑ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☑ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 1 7.2(a)).

*Certified copies not received: _____.

Attachment(s)

☑ Information Disclosure Statement(s), PTO-1449, Paper No(s). 6

☐ Interview Summary, PTO-413

☑ Notice of Reference(s) Cited, PTO-892

☐ Notice of Informal Patent Application, PTO-152

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Other _____

Office Action Summary

1. Applicant's election of Group II invention for examination, which includes claims 15-28 and 43-50, is acknowledged. The election was made without traverse. Non-elected claims 1-14, 29-42 and 51-53 are withdrawn from consideration. However, Applicant is reminded to cancel the non-elected claims at the time the application is indicated allowable.

2. This application is in condition for allowance except for the following formal matters:

Non-elected claims 1-14, 29-42 and 51-53 still exist in the application and should be canceled in order to place the application for allowance.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

3. The following is an examiner's statement of reasons for allowance:

Claims 15-28 and 43-50 are allowable over the prior art of record. Please note that the references cited below, either prior art or non-prior art, do not teach an image reading apparatus as claimed in independent claim 15, comprising control means for reducing barycenter movement of read positions of a plurality of color components in the sub-scanning direction, that is generated by afterglow characteristics of the plurality of color components contained in the light source for illuminating an original image, the reading apparatus irradiating an original

image with the light source and forming an image corresponding to the original image on an image sensing device through an imaging optical system while scanning the original image in main and sub-scanning directions so as to read the original image. Independent claim 43 is a method claim corresponding to the apparatus claim 15. Claims 16-28 depend upon claim 15. Claims 44-50 depend upon claim 43.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Iwama (U.S. Patent No. 5,450,215) discloses a color reading apparatus and method to read enhanced color signals by removing afterglow electric charges.

Nagano (U.S. Patent No. 5,920,408) discloses a color image reader having three fluorescent lamps of red, green and blue for scanning a color image in a short time.

Canon Inc (Japanese Patent No. JP02000209399A) discloses a picture reader for preventing color slurring in reading position of vertical scanning direction, which occurs owing to the difference of the afterglow characteristics of phosphors in respective colors in the case of controlling the light of a fluorescent lamp by installing a means for reducing the shift of the

centroid of a reading position in the vertical scanning direction of the respective colors, which occurs depending on the afterglow characteristic of a white light source.

Canon Inc (Japanese Patent No. JP02000069232A) discloses an image reader for preventing color slurring caused in the reading of image in a subscanning direction due to the difference in the afterglow characteristic of each color by reducing the centroidal positions of each color in the subscanning direction caused, depending on the afterglow characteristic of a white light source.

Canon Inc (Japanese Patent No. JP02000069227A) discloses an image reader for preventing color slurrings caused in reading of an image in a subscanning direction due to the difference in the afterglow characteristic of each color when the luminous quantity of a white light source for emitting a light to an original is controlled by reducing the centroidal movement of read positions of each color in the subscanning direction caused, depending on the afterglow characteristic of the white light source.

Canon Inc (Japanese Patent No. JP02000069225A) discloses an image reader for preventing color slurrings produced in reading of an image in the subscanning direction due to the difference of the afterglow characteristic of each color.

Canon Inc (Japanese Patent No. JP02000050018A) discloses an image reader for preventing color smear in an auxiliary scanning direction by delaying the start position of a control pulse in a means which performs light control of a white light source for original irradiation different in the afterglow characteristics of respective colors through the use of a pulse

width modulation system when the image information of an original is formed on a plurality of line sensor by an image forming optical system.

Canon Inc (Japanese Patent No. JP02000050017A) discloses an image reading and image reading method for preventing color smear in an auxiliary direction by forming image information of an original on a plurality of line sensors by an image forming optical system, taking out only charges which a plurality of line sensors accumulate in a lighting period by the light control of a white light source for original irradiation difference in the afterglow characteristics of respective colors.

Canon KK (European Patent No. EP000973327A2) discloses an image reading apparatus and method which eliminates color misregistration upon reading in the sub-scanning direction, which occurs due to different afterglow or persistence characteristics of the respectively colors of a light source.

DERWENT Account No. 2001-251055 discloses an image reader having a determination unit which updates control value used to center light emitted from fluorescent lamp around present position, for every shading measurement operation.

DERWENT Account No. 2000-263805 discloses an image reader having pulse width modulator to reduce central deviation of each color based on amount of light emitted from fluorescent lamp.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheukfan Lee at telephone number (703) 305-4867.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist at telephone number (703) 305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, DC 20231

or faxed to:

(703) 872-9314 (for formal communications intended for entry)

(703) 308-5397 (for informal or draft communications, such as proposed amendments to be discussed at an interview; please label such communications "PROPOSED" or "DRAFT")

or hand-carried to:

Crystal Park Two
2121 Crystal Drive
Arlington, VA
Sixth Floor (Receptionist)

C. L.
Feb. 3, 2003

Cheukfan Lee